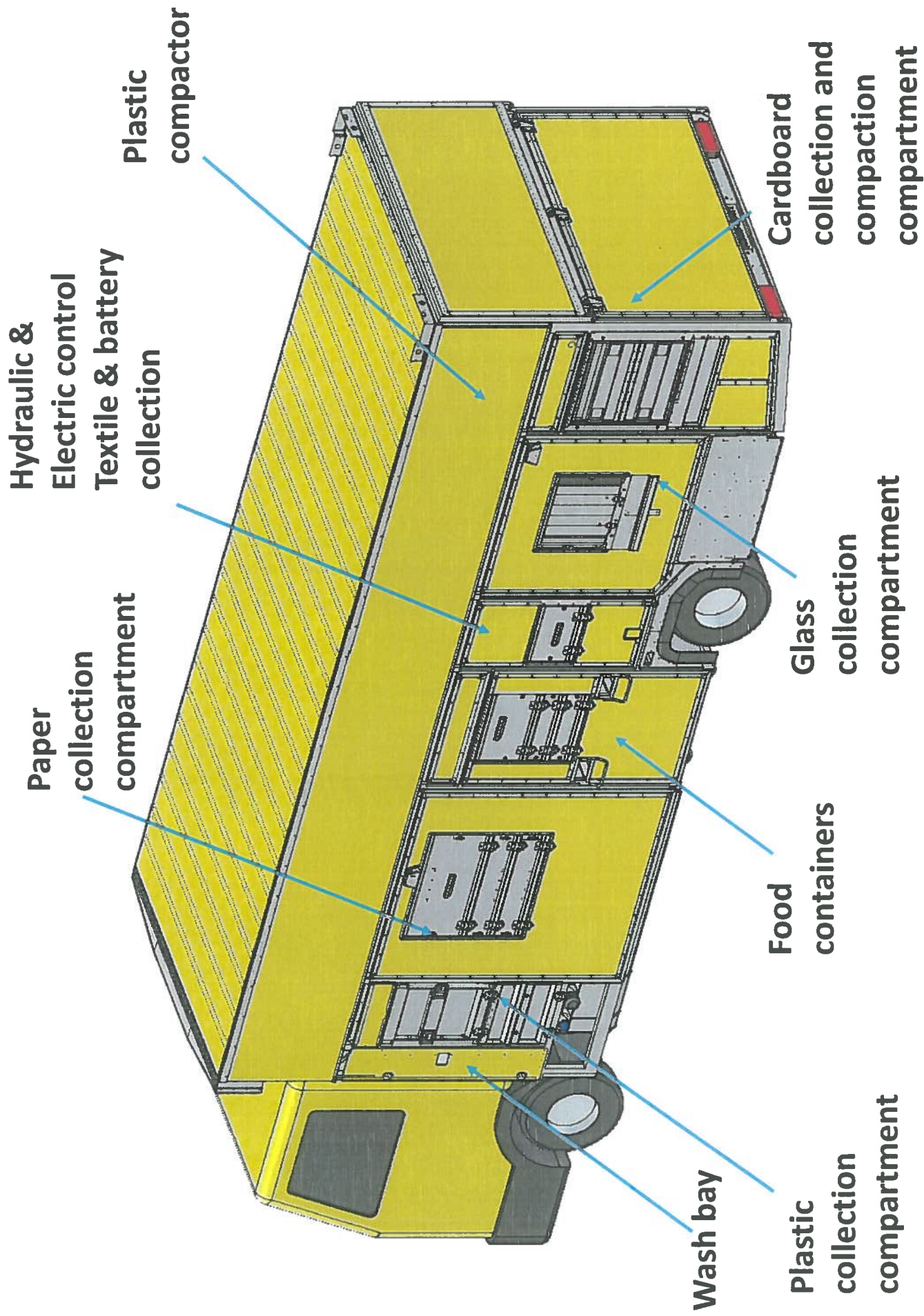




# Romaquip Kerb-Sort New Features 2016

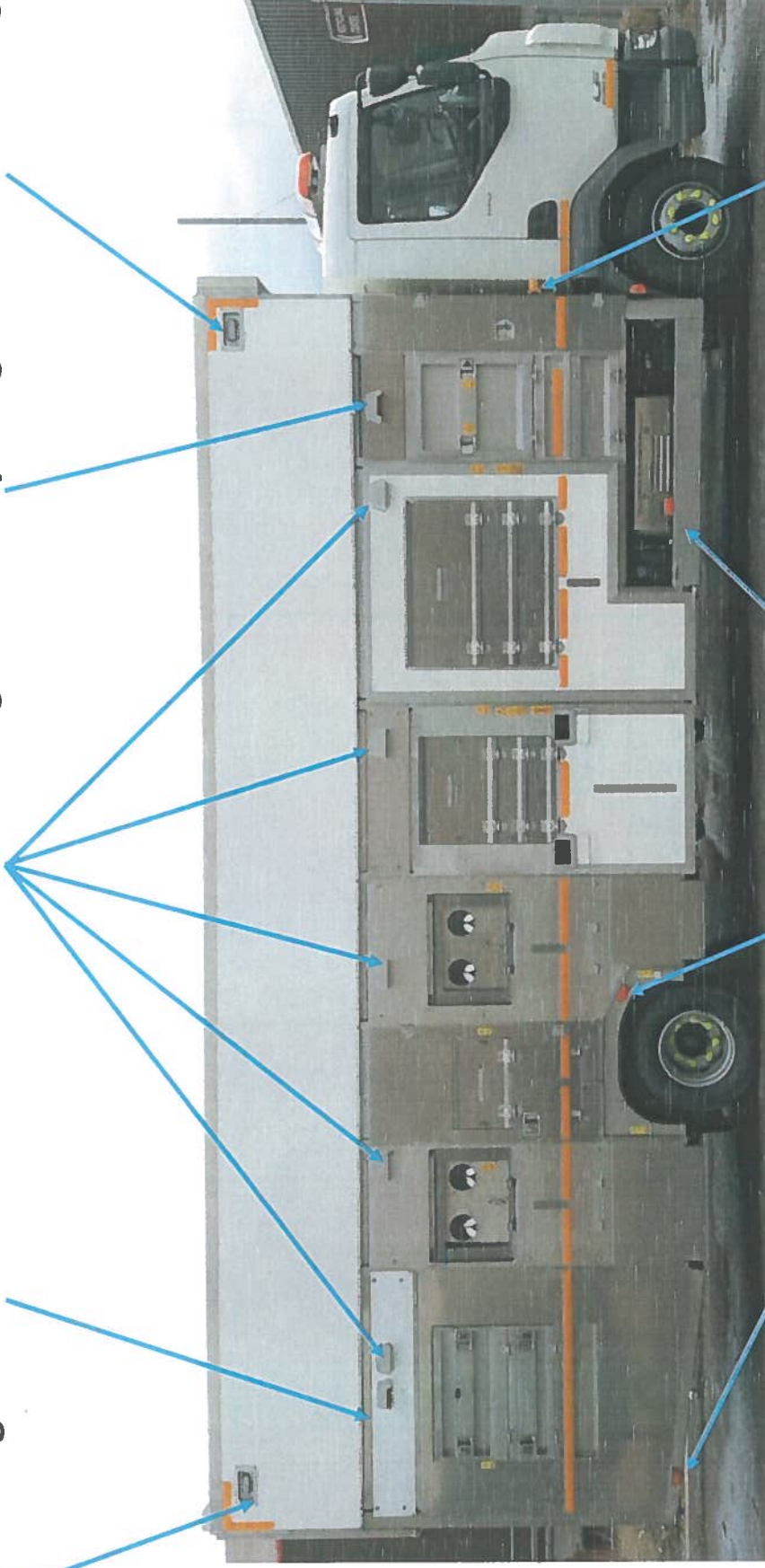
# Visual Tour





# Side View

Hazard light      Cycle light      Work lights      Cycle light      Hazard light



E-Stop

Side Marker  
Lights

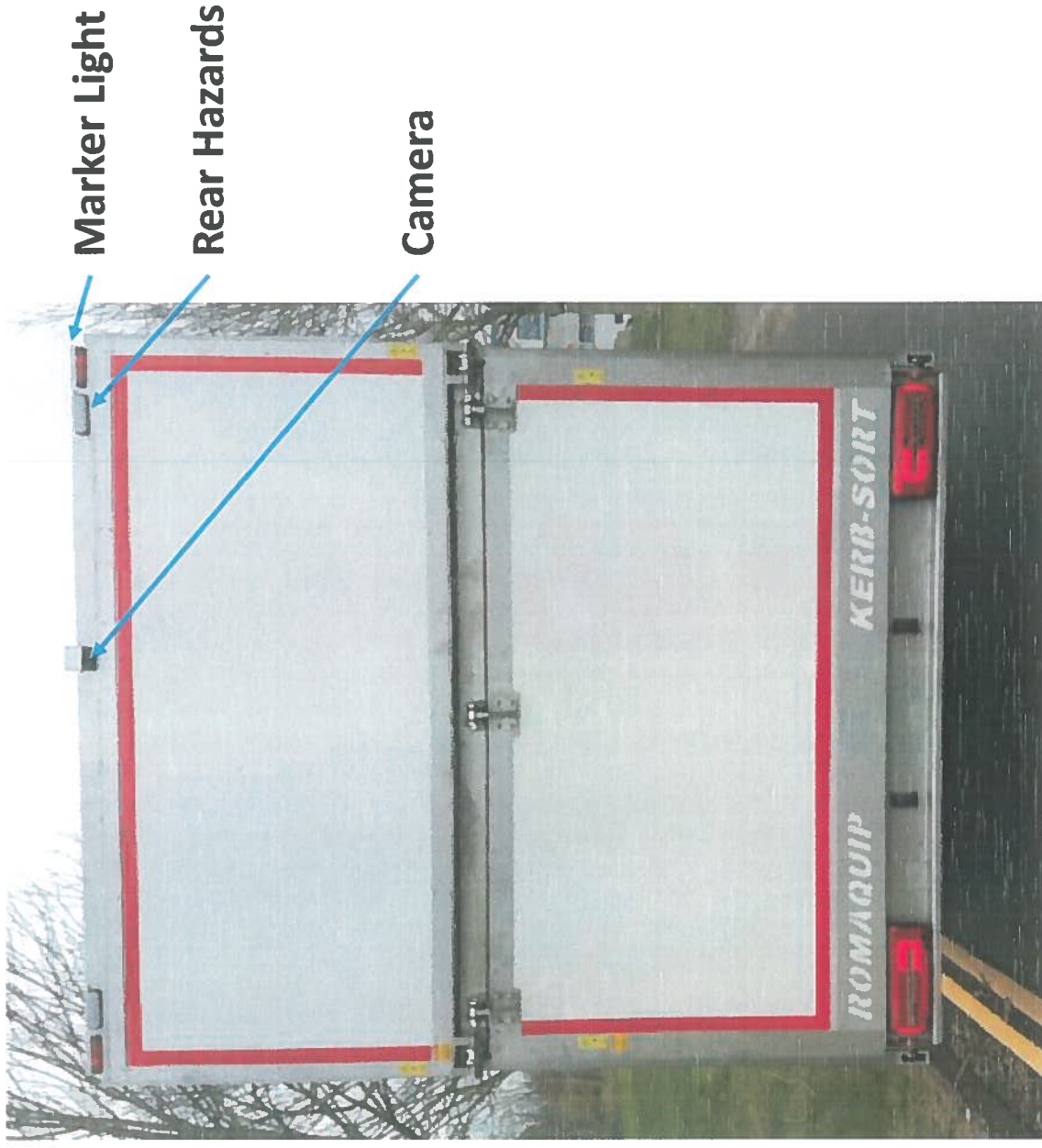
# ISO View

Beacon



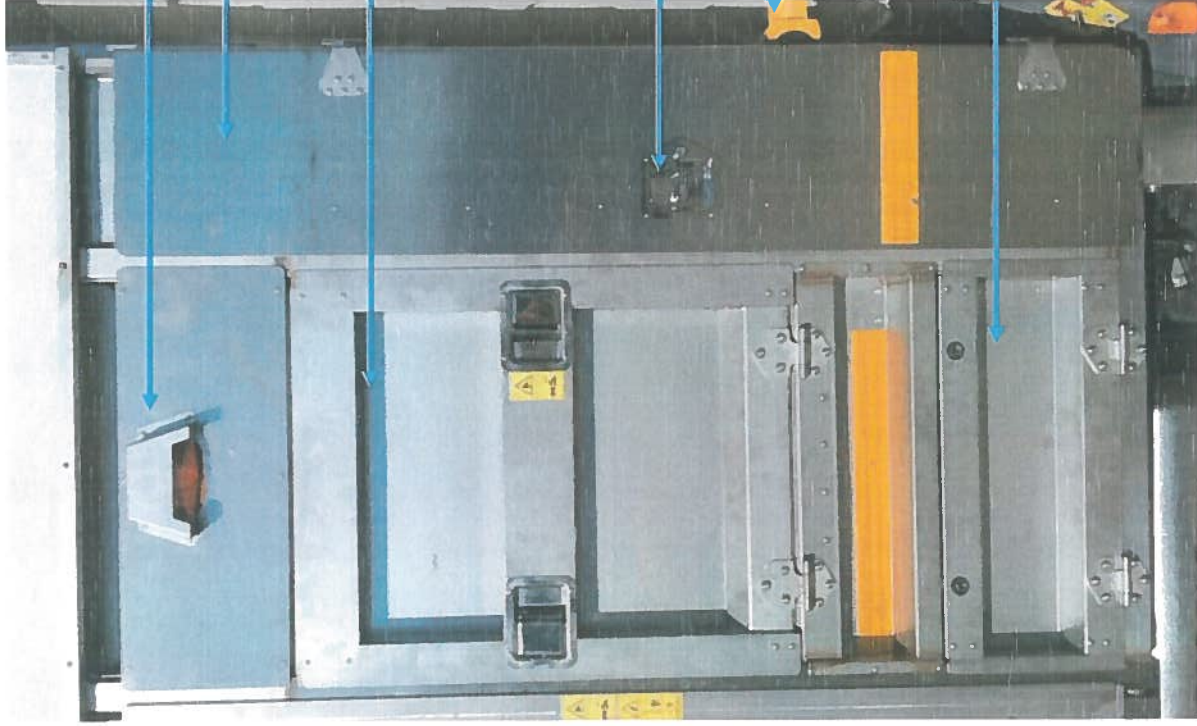
E-Stop

# Rear View





# Plastic Compartment



Cycle light

Personnel Bay

Plastic compartment

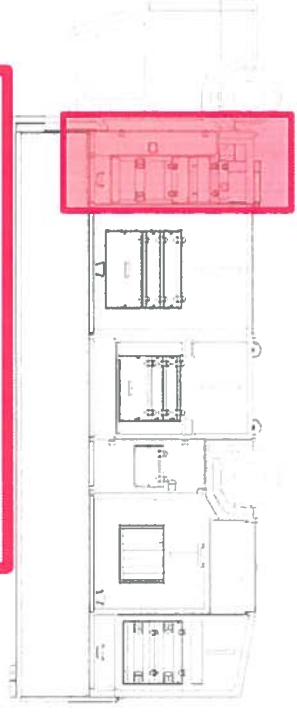
Twist Lock

E-Stop

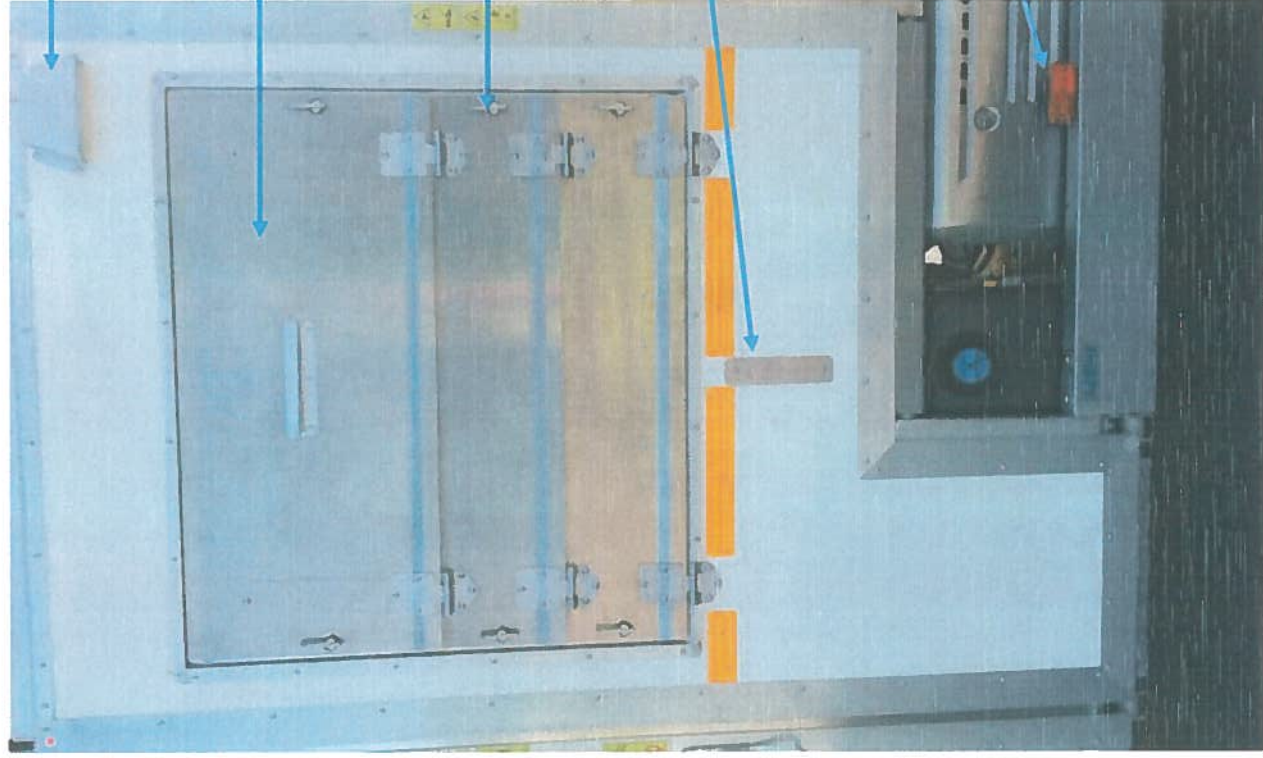
Service door



Optional Sensor  
button for elevation  
and compaction  
Cycle



# Paper Compartment



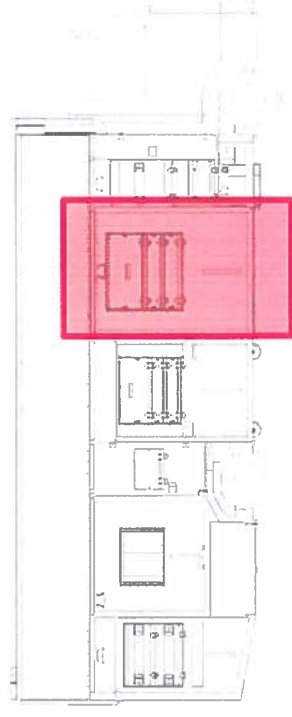
Work light

Loading door

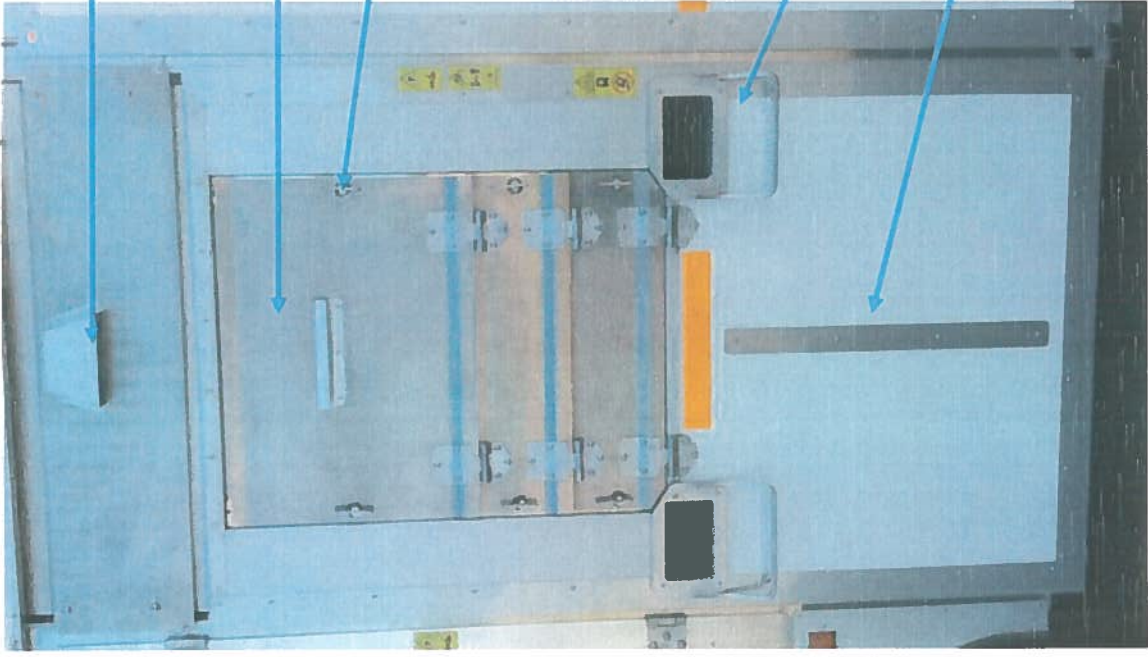
Anti luce

Buffer plate

Marker light



# Food Compartment



Work light

Loading door

Anti luce

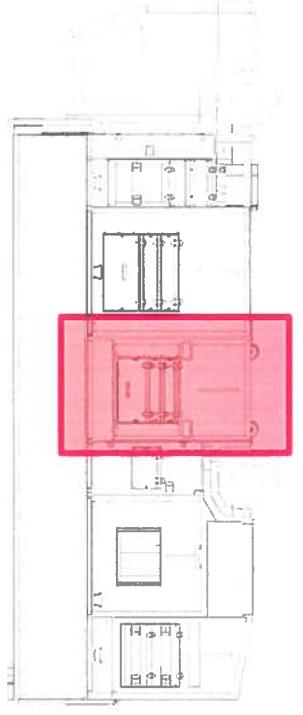
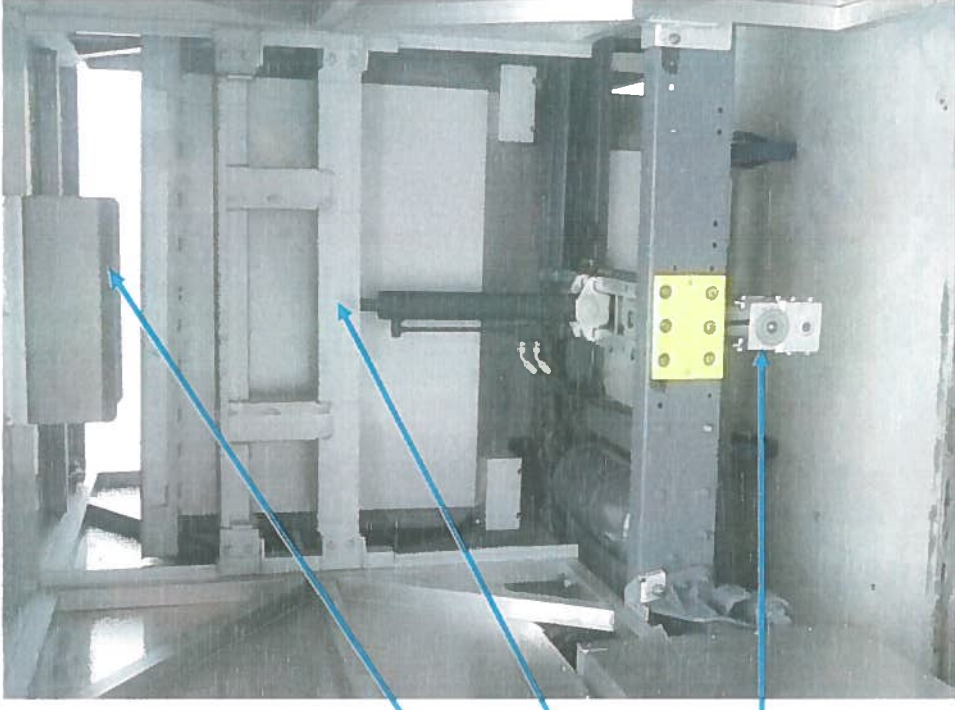
Lock

Lifter

Magnet

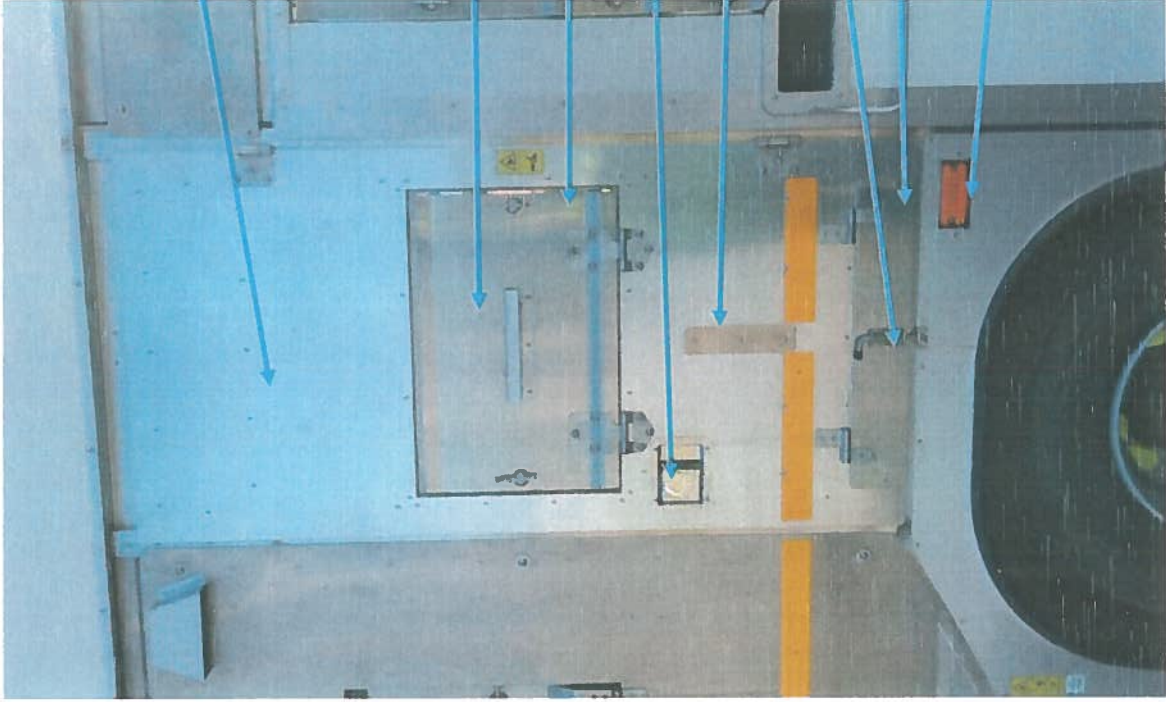
Handle

Buffer plate





# Textile Compartment



Textile  
Compartment

Loading door

Anti lucent

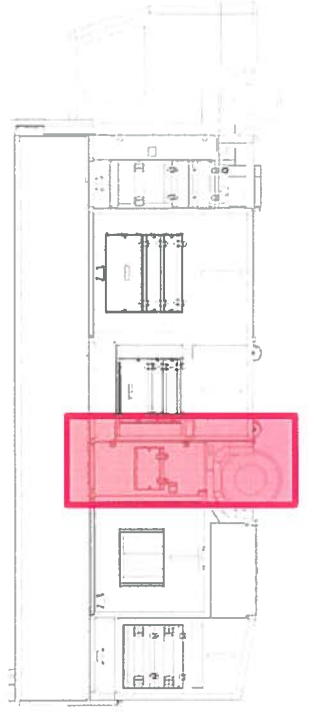
Paddle Lock

Buffer Plate

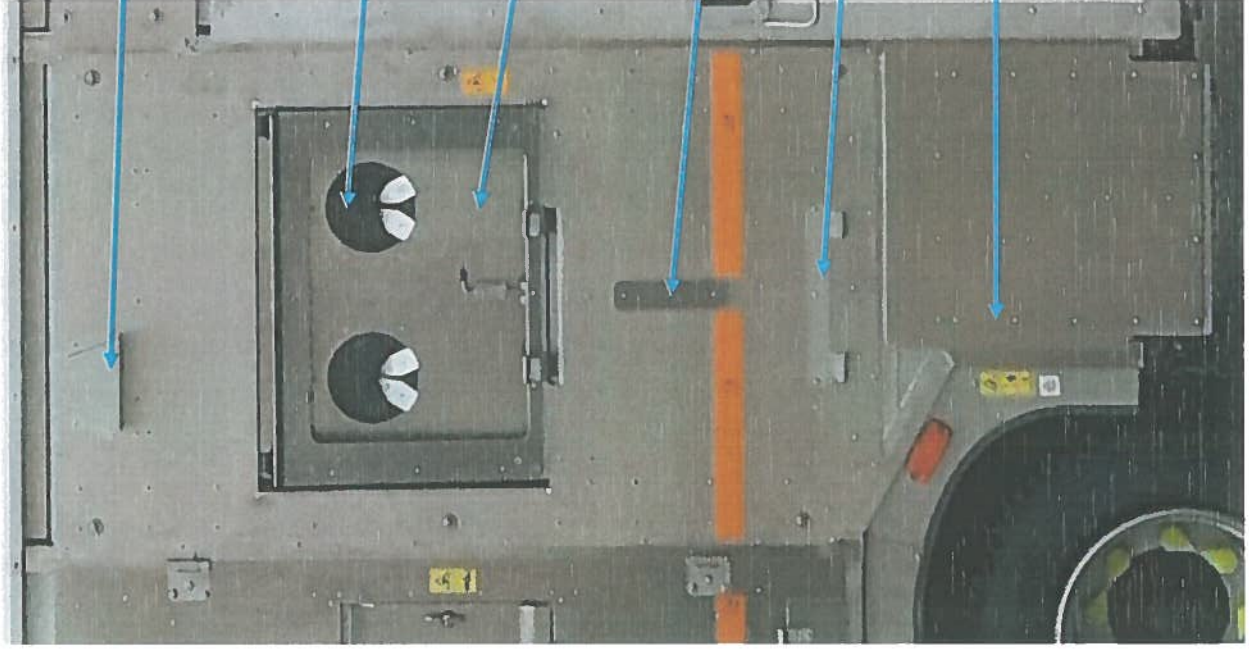
Spring lock

Optional trolley door

Side Light



# Glass Compartment



Work light

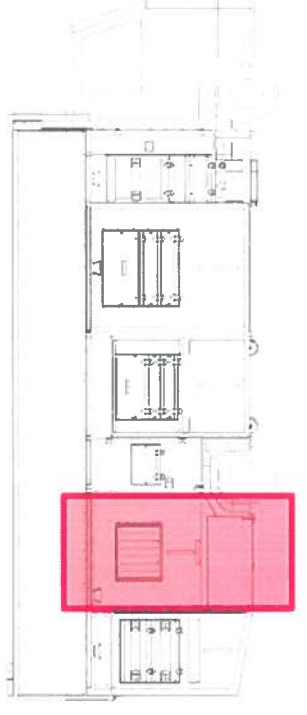
Post holes

Loading door

Buffer Plate

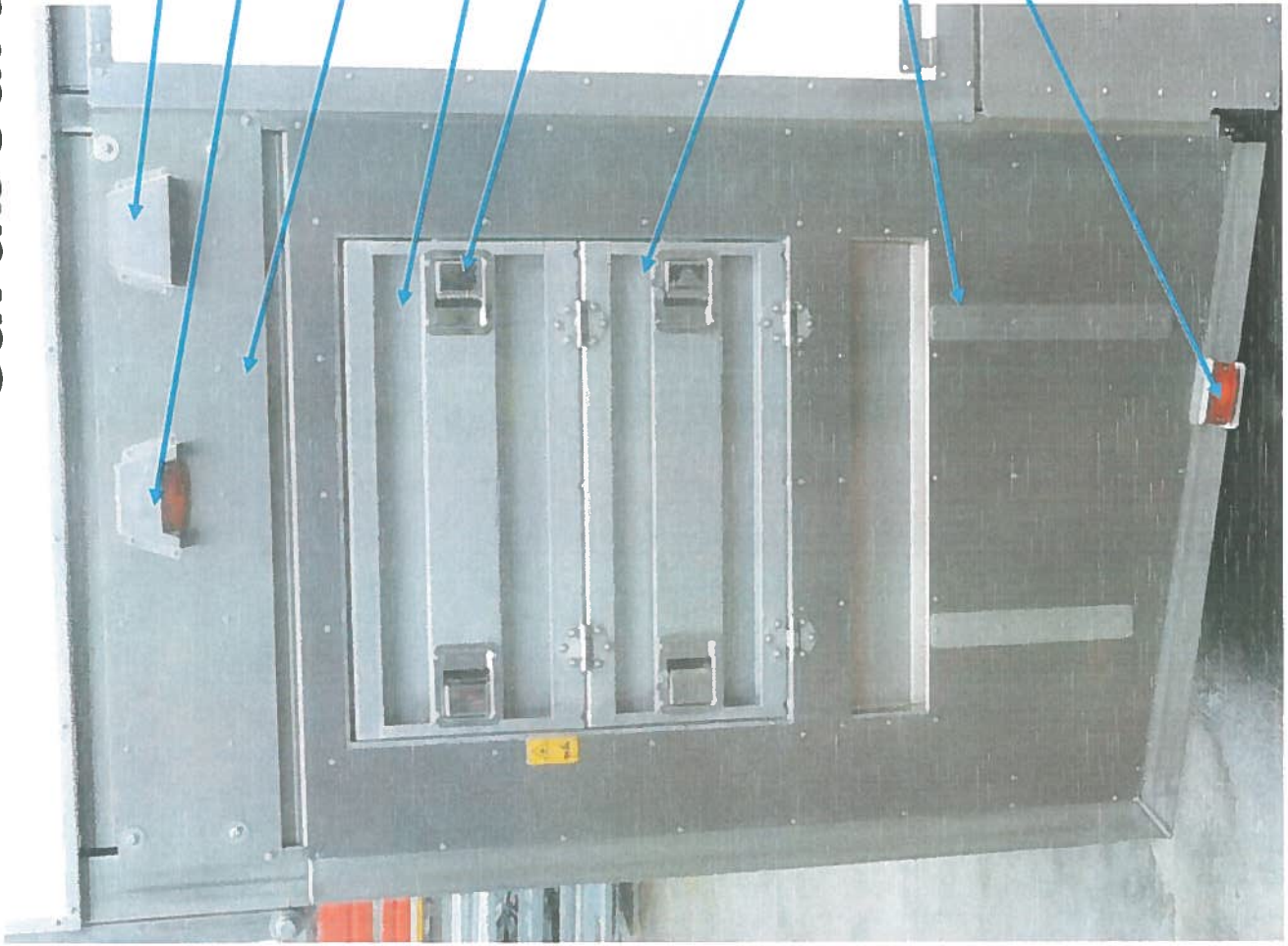
Bin hook

Unloading flap





# Cardboard Compartment



Work light

Cycle light

Ram Access

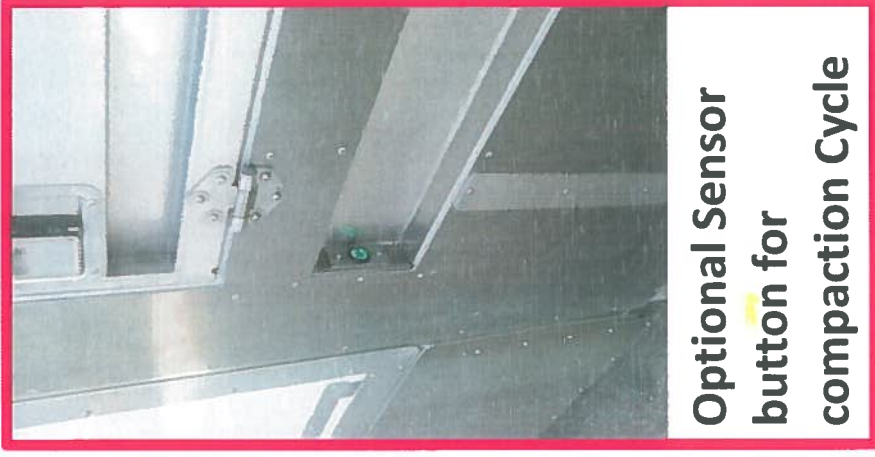
Loading Door

Paddle lock

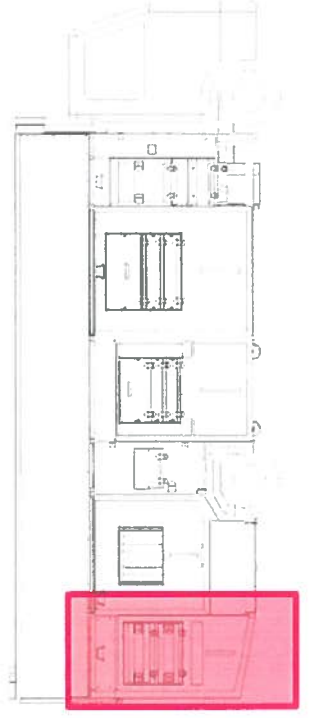
Thumb lock

Buffer Plate

Marker Light



Optional Sensor  
button for  
compaction Cycle



# **Romaquip Kerb-Sort New Features 2016**

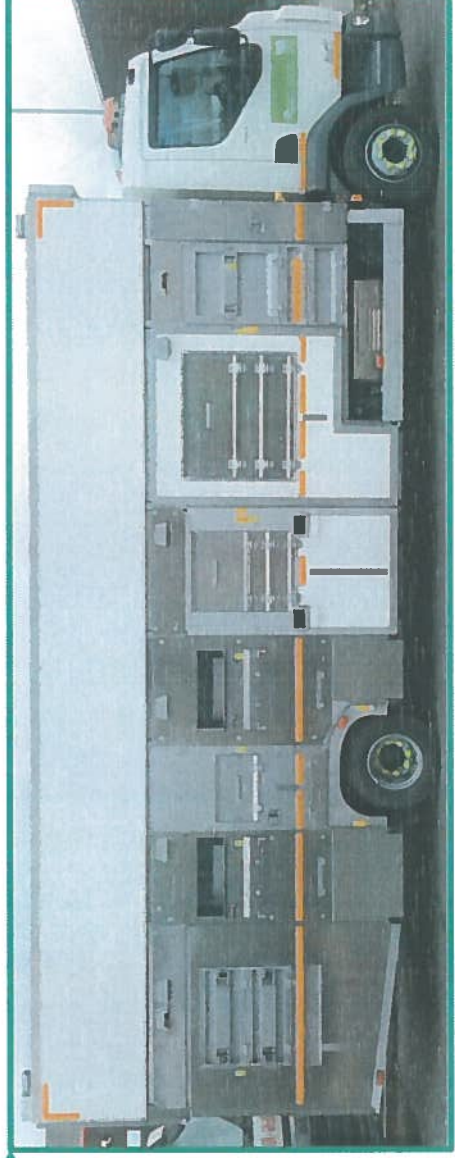


# Roof Lighting

- **As a result of strikes from low lying branches it was brought to our attention that damage could be caused to the wiring located on the roof of the Kerb-Sort in areas where trees are unmaintained.**
- **To eradicate this problem the engineering team in Romaquip devised a new system of mounting the side hazard lights which are now recessed into the top body panel.**
- **The rear lights and cables are now housed in a reinforced stainless steel housing designed to deflect all branch strikes away from the body.**
- **All wiring is now removed from the vehicle roof.**

# Roof Lighting

**Original set up with lights mounted on the roof**



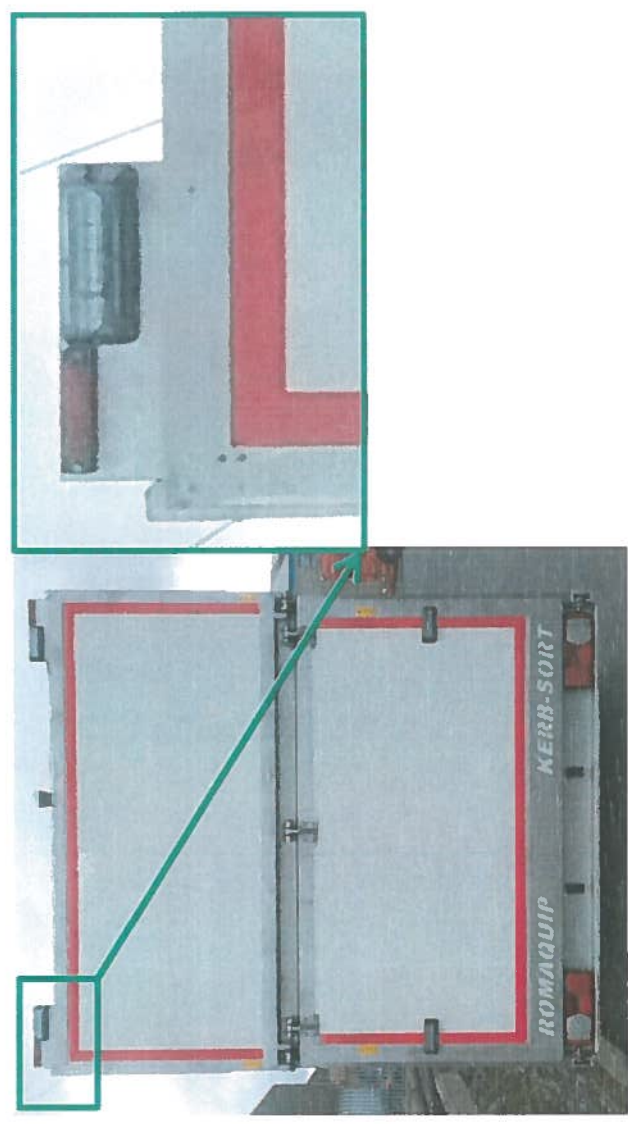
**New set up with lights recessed into the body**



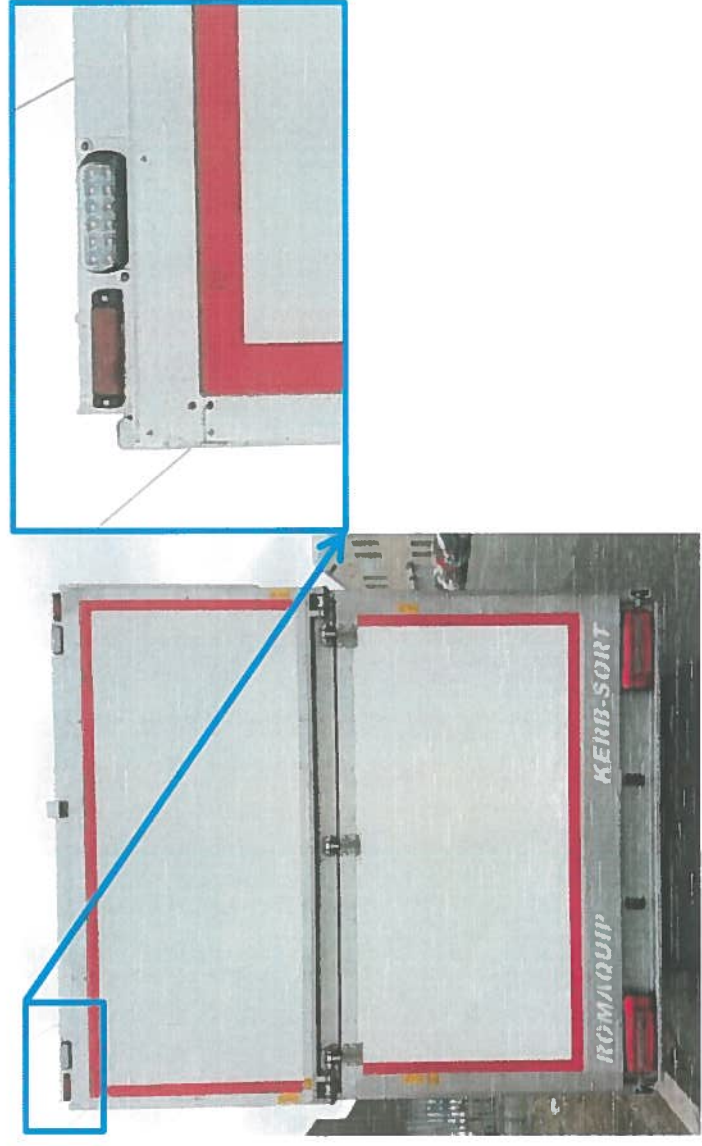


# Roof Lighting

Original lighting set up with lights mounted on the roof



New system where rear lights and wires are now housed in a reinforced stainless steel housing designed to deflect all branch strikes away from the body.



# Roof Lighting

**Old design with lights and cables mounted on the roof**



**New design with no cables on the roof and fitted with rear branch deflection light housing**



# Cardboard Compaction Option

- **By listening to our customers feedback on cardboard collection volumes required in some collection areas, the team in Romaquip decided to design and new heavy duty compaction unit option for customers who have especially large volumes of cardboard to collect.**
- **The new compactor has been tested and released for 2016 with patent pending.**
- **The new compactor allows the cardboard to be compacted with consistent force throughout the stroke of the compactor ram, as compared to previous design that reduces force as cardboard reaches a higher level. The new design also allows for up to 100% more compaction force in conjunction with a heavy duty body frame, side gripper racks with teeth are also fitted to hold and control cardboard rebound memory.**



# Cardboard Compaction Option



Heavy duty compaction plate with integrated ribs for even compaction

Heavy duty stainless steel Compactor scissor arms

Cardboard grippers

# Cardboard Compaction Option



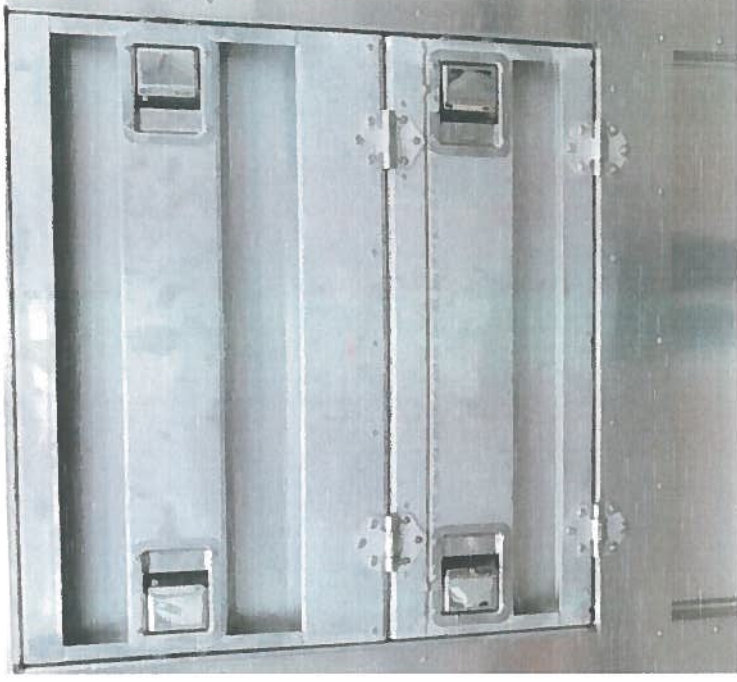
**Maximum cardboard payload achieved with new heavy duty patent pending compaction system is in excess of 700kgs**



# Cardboard Loading Door



**Original**

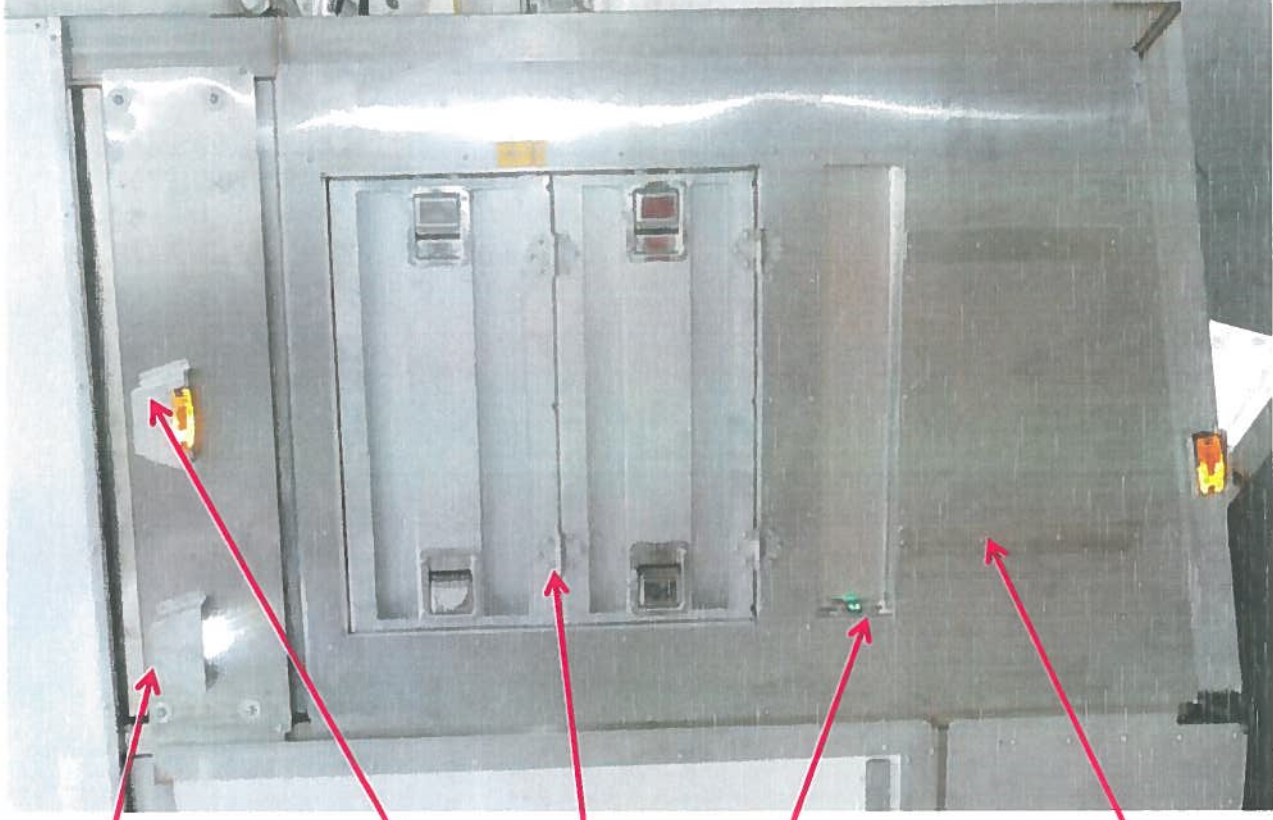


**New**

**New loading doors added to cardboard section  
These new doors are now on a 60:40 split allowing for easier loading at the  
optimum height once loading to the first stage level is complete.**



# Cardboard Section



- New LED loading lights now fitted over the compartment to allow for safe evening and early morning loading.
- The cardboard section is now fitted with an amber cycle light. This cycle light is operational when the compaction process is going through a cycle once the cycle is over the light switches off and the operator knows it is safe to load the Kerb-Sort again.
- Heavy duty stainless steel hinges now fitted to reduce the old piano hinge type resulting in drastically reduced maintenance.
- An exterior back lit control button is now fitted to the passenger side cardboard collection area which enables the operator to operate the compaction cycle from the kerb side. As a safety feature this will only operate when the handbrake is on and the truck is not in gear.
- Aluminium buffer plates now fitted to protect clients body wrap from impact damage from the doors. This has resulted in a cleaner looking vehicle that is on view to the public on a daily basis.

# Anti Debris Unloading System



**New**



**Original**

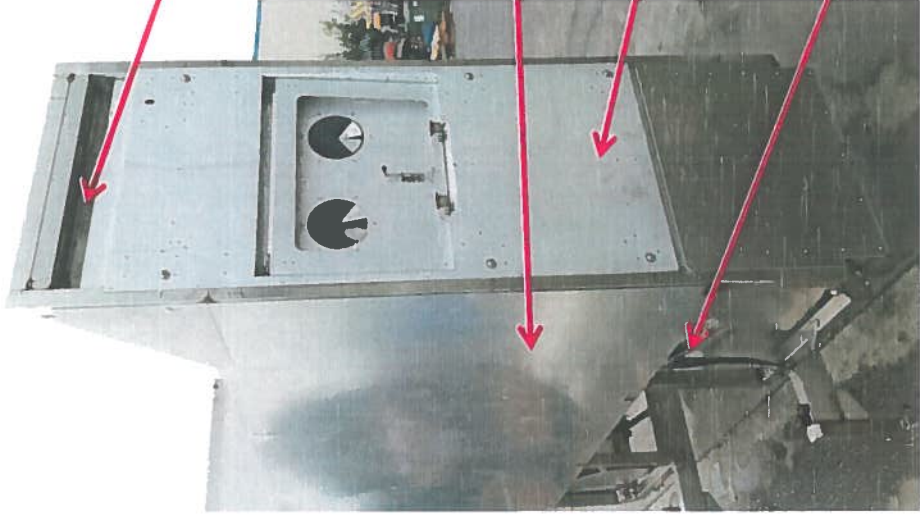
- New heavy duty anti debris unloading system which eliminates material from the top section entering the door ram area over the cardboard section.
- These flaps are opened using the force of the tetra in the top compartment as it is unloaded.
- The flaps are closed using the top door closing motion.
- There are no electrical or hydraulic systems used to power the flaps resulting in ease of maintenance.

# New Glass Loading Section

- In order to remain market leaders in Kerbside recycling at Romaquip are constantly improving our products aided by customer feedback whilst remaining within the regulatory constraints. Romaquip have undertaken an improvement project on our glass loading system which has significantly improved its acoustic performance.
- The glass section is now fully insulated from floor to top with acoustic reduction materials.
- The Glass section now incorporates a fully sealed loading door which ensures the loading container makes the a seal throughout the loading process thus reducing noise rebound to the operator.
- New Post hole system introduced for high level loading with integrated chutes which ensure that the glass is spread evenly across the loading bay resulting in extra volumes of recyclables for the customer.



# Glass Loading Compartment



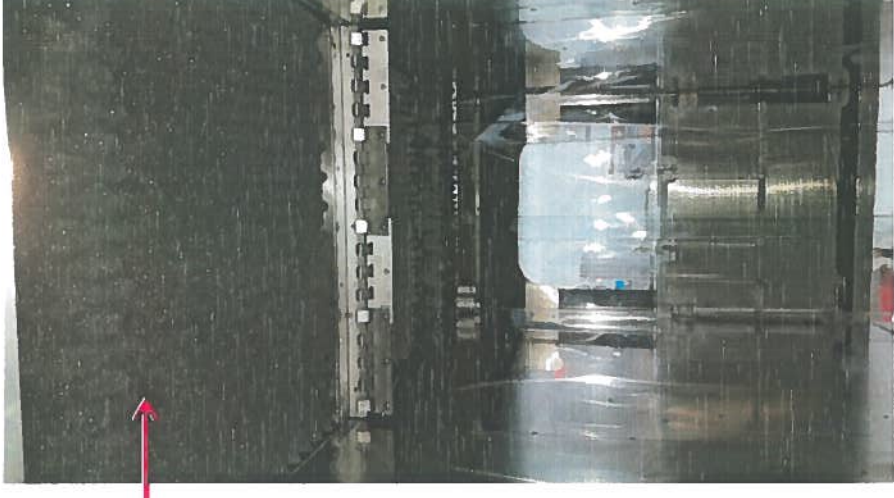
Acoustic dampening material to compartment roof

Fully insulated compartment walls

Insulation behind door Panel

Fully insulated compartment Floor

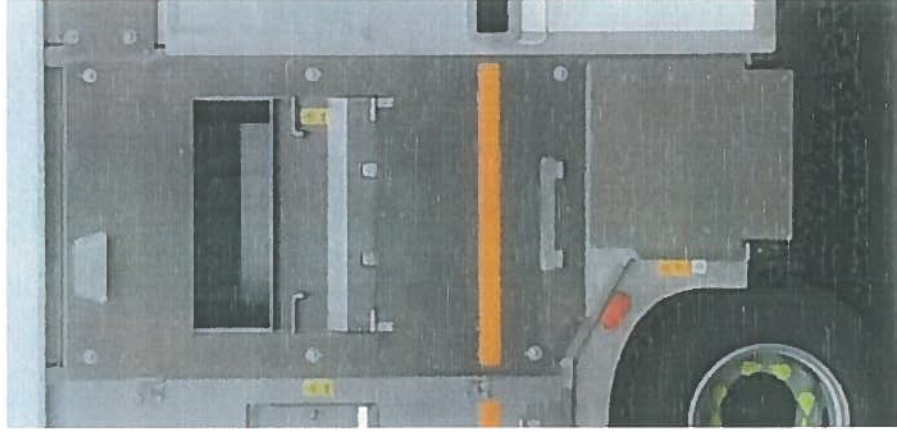
**Fully Insulated test Rig**



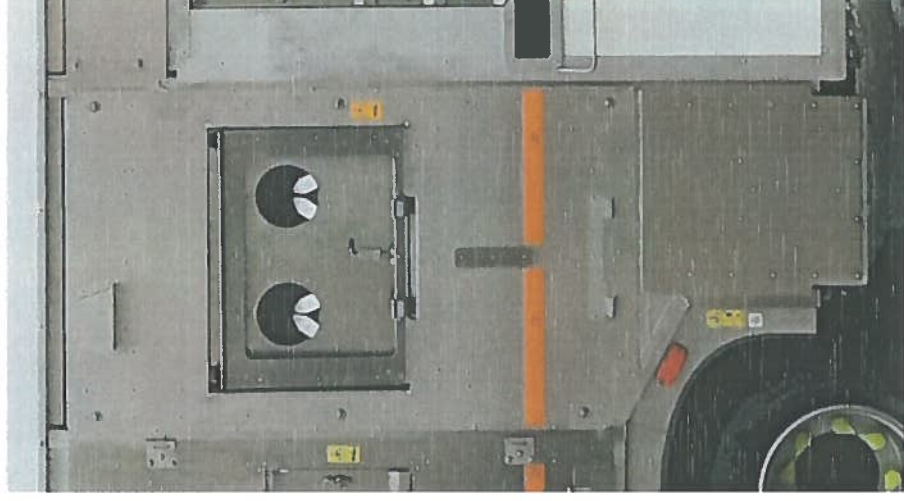
**View from inside**

- Romaquip have manufactured a full scale test rig during the new glass loading design process to allow us to carry out physical testing on various acoustic dampening materials.

# Glass Loading Door



**Original**



**New**

- New fully enclosed loading system which ensures a large percentage of the glass loading noise is contained within the compartment.
- Fully sealed Post holes incorporated into the loading door to replace old overload door option ensures that a seal is maintained at all times when loading and glass rebound can not occur.

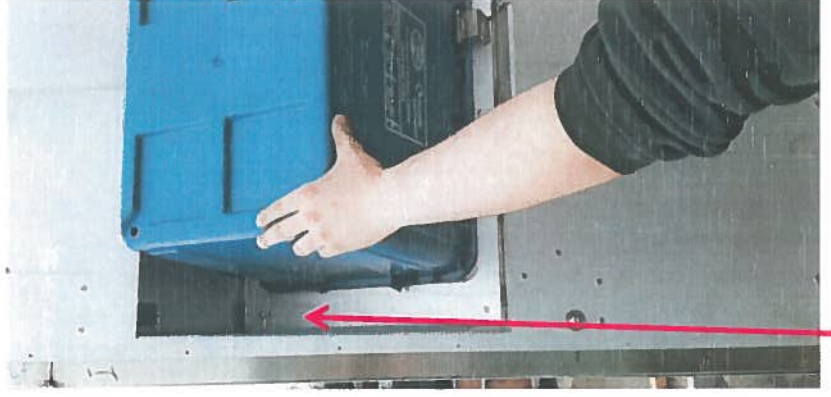
# Glass Loading Bay



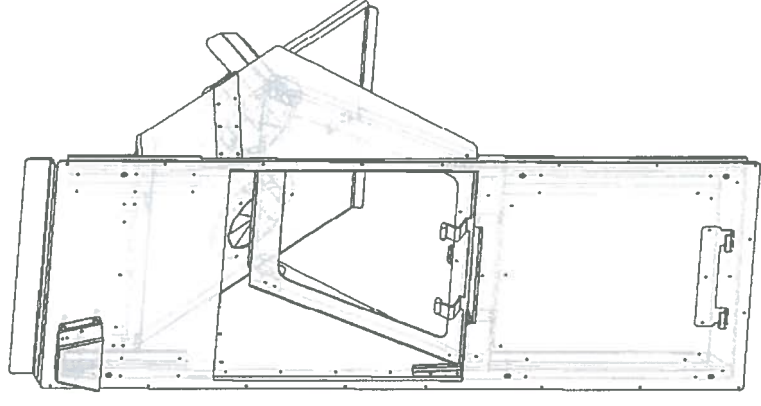
**Bin Hooked on**



**Unloaded**



**Seal maintained**



- The glass container when unloaded creates a full seal between the opening and the collection bay thus reducing noise rebound.
- The door returns to the closed position as the container is removed.



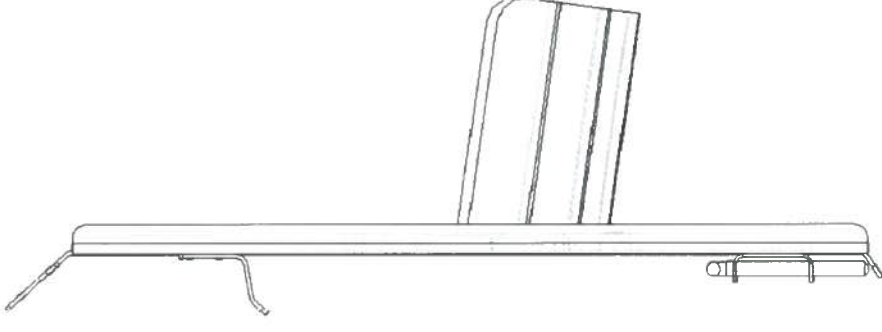
# Overload Door



Door lock



View from inside



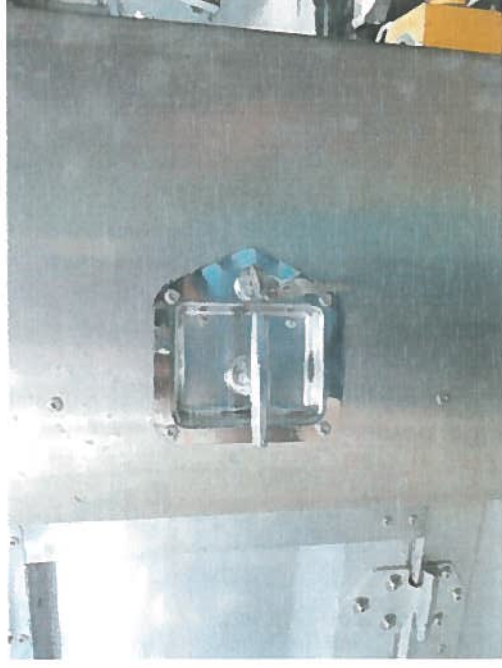
Side view of chutes

- Once the glass has reached the limits of loading with the container the door can be locked into position and the operator can use the overload post holes to load more glass.
- The integrated chutes ensure that the glass is spread evenly across the loading bay resulting in extra volumes of recyclables for the customer.

# Safety Interlocks

- The current range of vehicles are fitted with inductive safety sensors on the cardboard and plastics loading hatches to a rating of SIL 3 which exceed current safety regulations, however Romaquip are now in a position to provide our customers with an option to upgrade to an RFID based safety interlock system.
- The RFID safety interlock is a new safety system that use a safety emitter/receiver that links to an electronically coded tag on plastics and cardboard loading hatches. The major advantage this system has over inductive proximity is that it is impossible for anybody to trick or bypass the system with by placing metal over the sensor. It will not work unless it sees a coded tag (mounted on the cardboard and plastics hatches).

# Personnel Storage compartment



New lock



Lobby Brush

- Fitted with new heavy duty twist lockable handle for extra security for personnels belongings.
- New high quality lobby brush option with integrated holder to store neatly in the compartment



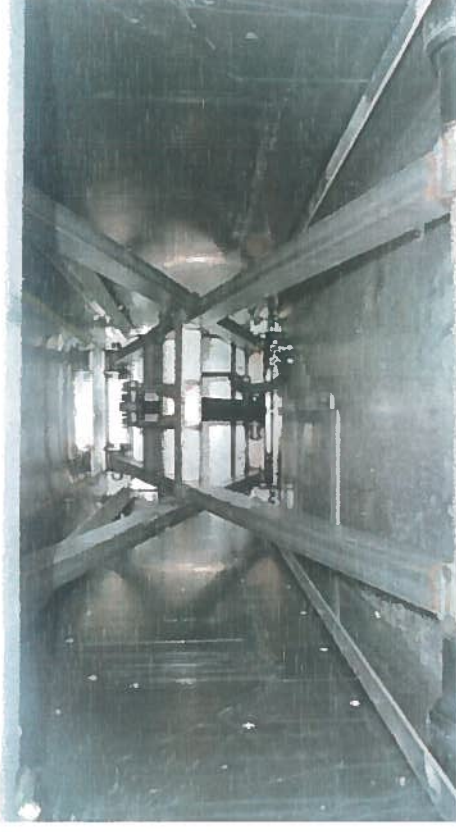
# Hydraulic Block Cover

Front valve block cover fitted to protect from damage caused by excessive power washing.

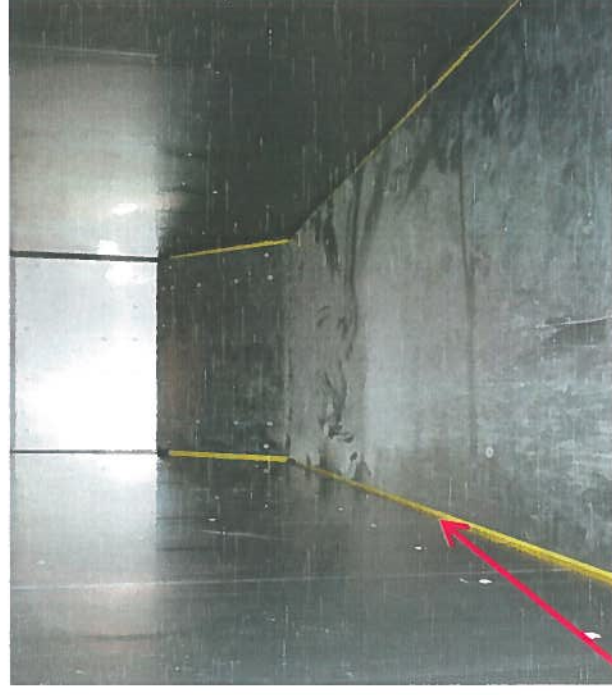


## Front plastic and can collection compartment.

- New containment area floor under the front elevator to prevent debris falling onto the road.
- Fitted with integrated drain system for ease of cleaning
- Six independently mounted UHMPWE side scrapers to prevent debris falling onto bottom containment area.



Containment area



UHMPWE side scrapers

# Plastics and Can section

- The plastic and can section is now fitted with an amber cycle light. This cycle light is operational when the compaction process is going through a cycle once the cycle is over the light switches off and the operator knows it is safe to load the Kerb-Sort again.
- New LED loading lights now fitted over the compartment to allow for safe evening and early morning loading.
- An exterior back lit control button is now fitted to the passenger side plastic and cans collection area which enables the operator to operate the compaction cycle from the kerb side. As a safety feature this will only operate when the handbrake is on and the truck is not in gear.





- New driver and passenger side safety interlocked wash/service access doors to simplify cleaning of the containment area under the front elevator.
- New software function to operate the elevator for the cleaning process which lifts the elevator to its highest level. For safety this function will only work when all interlocked doors are closed.



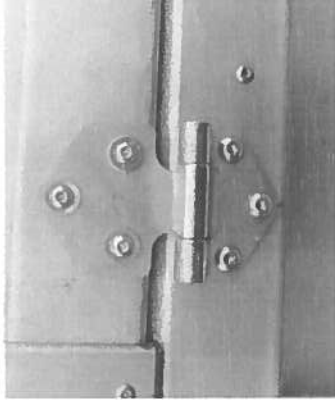
Wash/Service access doors



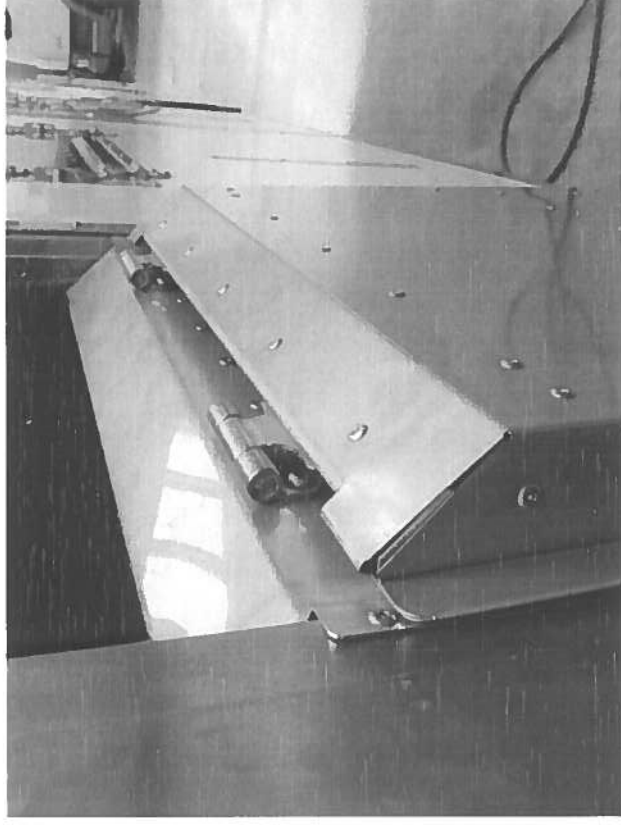
- Auto shutdown proxy sensor.
- If the door is opened the elevator and top compactor are disabled to ensure operator safety

# Plastics and Can section

- New plastic and can loading doors fitted 75mm lower than previous models for extra ergonomic satisfaction on operators.
- Heavy duty stainless steel hinges now fitted to reduce the old piano hinge type resulting in drastically reduced maintenance.
- New plastic and can loading door faces angled at 45 degrees to prevent the build-up of debris in the hinge area allowing the doors to be closed without cleaning the hinge plates.

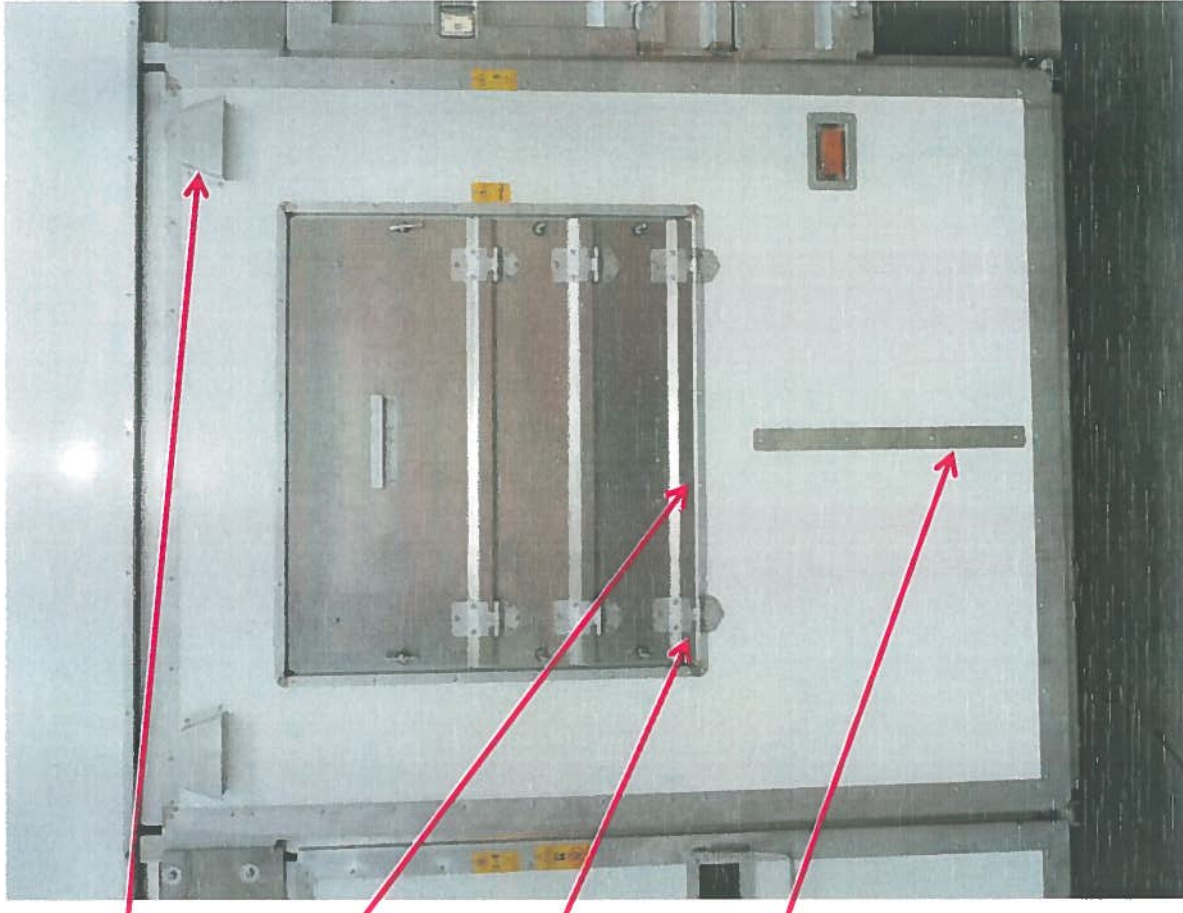


Heavy duty hinge



Tapered door edge to avoid trapping of recyclables (New Type)

# Paper collection compartment



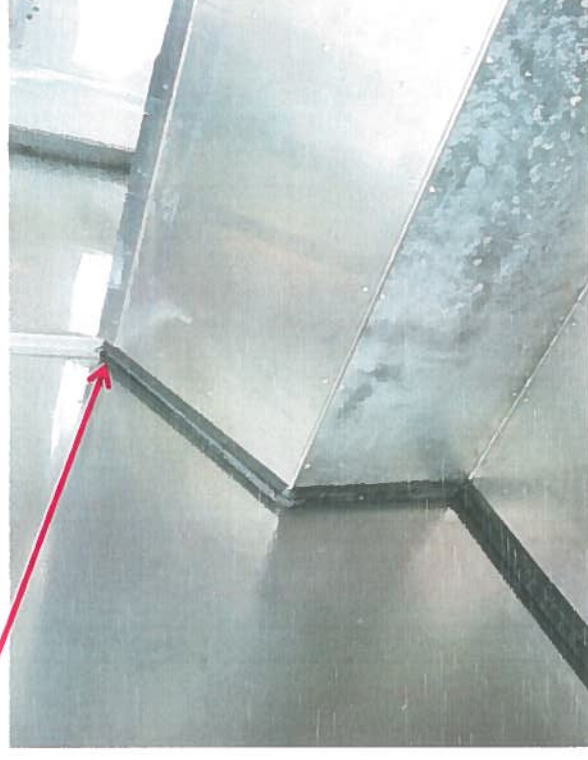
- New LED loading lights now fitted over the compartment to allow for safe evening and early morning loading.
- New aluminium loading doors 100mm lower than previous models for extra ergonomic satisfaction on operators.
- Heavy duty stainless steel hinges now fitted to reduce the old piano hinge type resulting in drastically reduced maintenance.
- Aluminium buffer plates now fitted to protect clients body wrap from impact damage from the doors. This has resulted in a cleaner looking vehicle that is on view to the public on a daily basis.



# Paper collection compartment

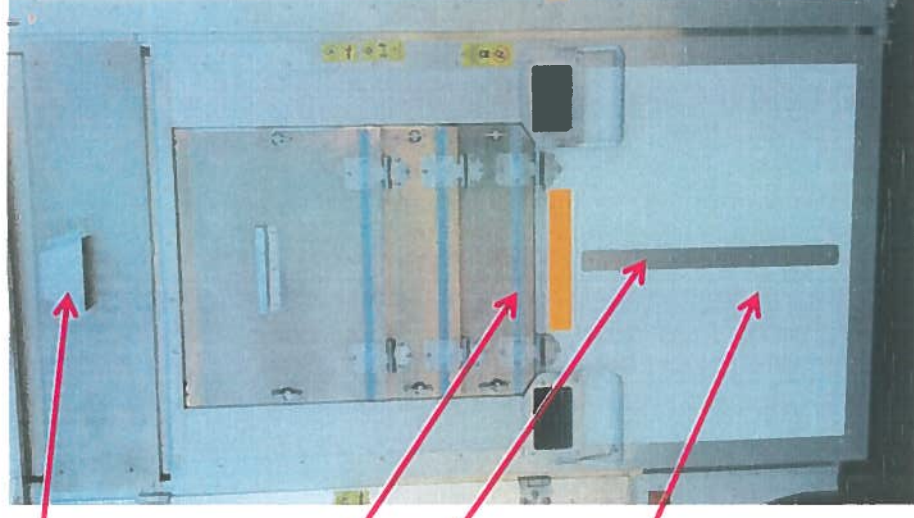
## Paper compartment

- New longer three position loading hooks on the doors.
- The floor in the paper compartment is now lowered by 160mm which now allows for easier cross loading.

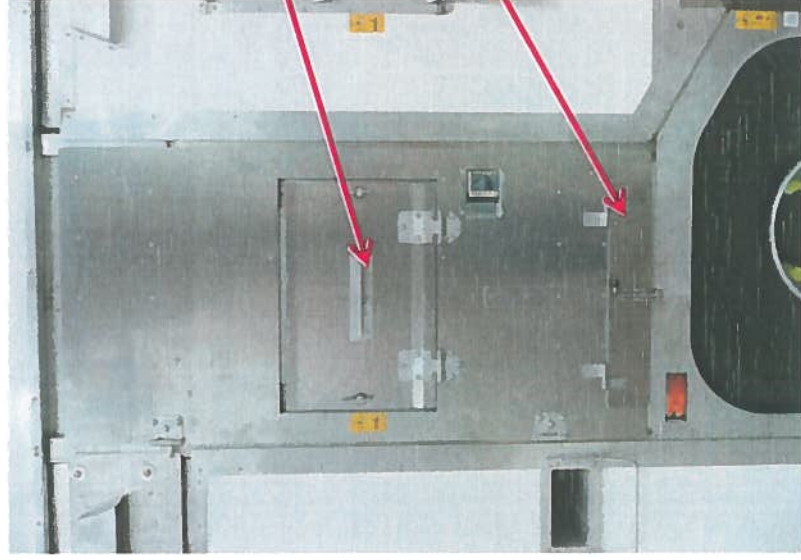


# Food collection compartment

- New LED loading lights now fitted over the compartment to allow for safe evening and early morning loading.
- New aluminium loading doors lower than previous models for extra ergonomic satisfaction on operators.
- Heavy duty stainless steel hinges now fitted to reduce the old piano hinge type resulting in drastically reduced maintenance.
- Aluminium buffer plates now fitted to protect clients body wrap from impact damage from the doors. This has resulted in a cleaner looking vehicle that is on view to the public on a daily basis.
- New optional stainless steel drain tap fitted to the bottom of the stillage to enable washing out while still fitted to the vehicle.
- New safety sensor at high level which warns the driver if the bins are not correctly locked into position before driving off.

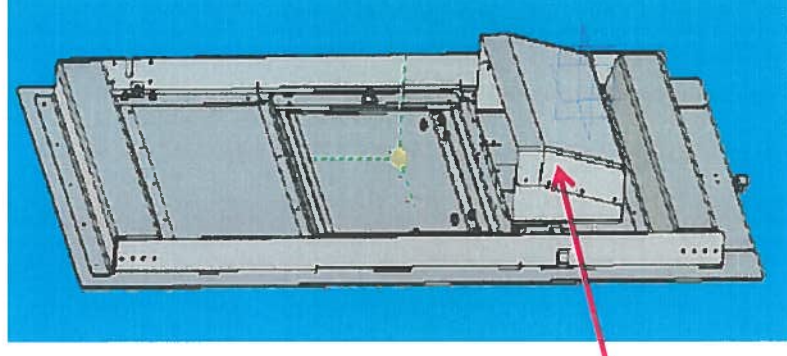


# General storage compartments



Loading hatch

Independent trolley loading door



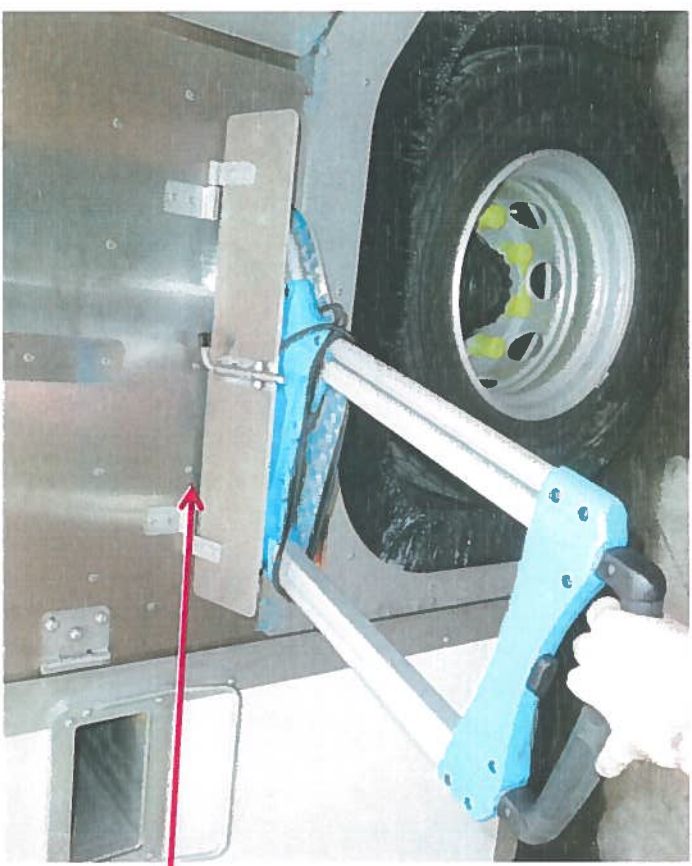
Optional Battery Collection Box

- The general storage door can now be fitted with a waste battery collection box as an option



# General storage compartments

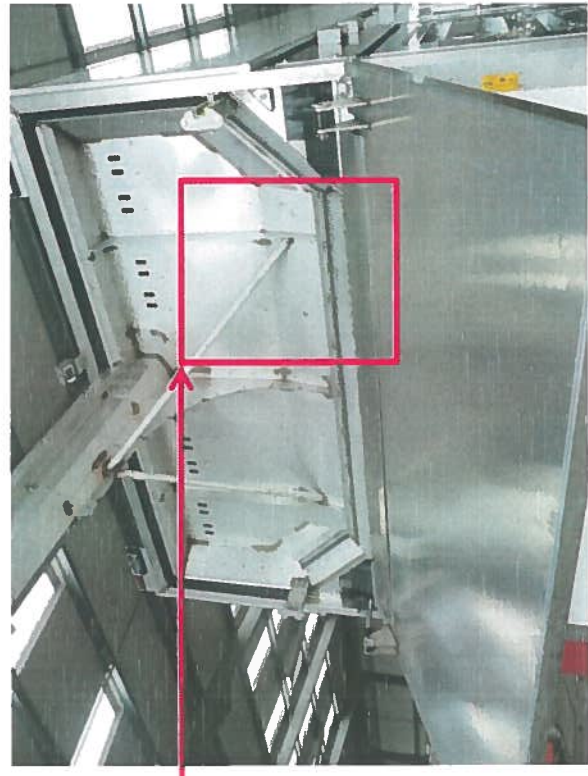
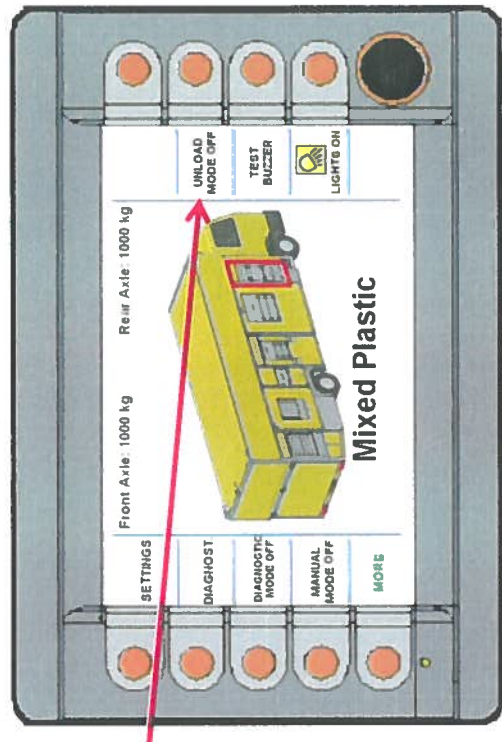
- Fitted with optional multi folding sack trolley for loader use in poor access areas.
- This trolley can be removed from its compartment without opening the main door through a flap provided. This ensures that any recycled material behind the main door will not fall out taking in and out the trolley.
- A hook for a battery collection box can also be provided behind the main loading flap eliminating the need to open the main door while also eliminating mingling with larger recyclables stored in the main compartment.
- Now Fitted with an internal LED work light for emptying out the storage areas.



Storage for trolley under floor

# Other Improvements

- Unload and load software control function now separates the Loading on the kerbside and the unloading in the recycle depot eliminating the opportunity to unload a compartment while on the pick up rounds.
- Tougher longer lasting brushes now fitted to the top compactor greatly reducing maintenance costs.





# Other Improvements

- Polymer sleeves now used in the majority of rams eliminating the scheduled greasing requirement.
- New optional drainage system fitted to the Kerb-Sort roof. This option removes the water from the roof through a gutter system eliminating the lateral over flow of rain water on top of the operators while they are carrying out their job

